

Title (en)
SITE-SPECIFIC ISOTOPICALLY-LABELED PROTEINS, AMINO ACIDS, AND BIOCHEMICAL PRECURSORS THEREFOR

Title (de)
SPEZIFISCH MARKIERTE PROTEINE, AMINOSÄURE UND BIOCHEMISCHE VORLÄUFER

Title (fr)
PROTEINES ET ACIDES AMINES, ISOTOPIQUEMENT MARQUES ET SPECIFIQUES DE SITES, ET PRECURSEURS BIOCHIMIQUES DESTINES A CES PROTEINES ET ACIDES AMINES

Publication
EP 1169282 B1 20050601 (EN)

Application
EP 00921858 A 20000407

Priority
• US 0009296 W 20000407
• US 28951799 A 19990409

Abstract (en)
[origin: WO0061525A1] Site-specific isotopically-labeled valine, leucine, and isoleucine and biosynthetic precursors for these amino acids are provided. The amino acids are labeled with $<^{13}\text{C}$ or $<^{14}\text{C}$ at the methyl group carbon atom(s) most remote from the carboxyl group. Also disclosed are the biochemical precursors of these labeled amino acids, 2-keto-4-($<n\text{C}$)butyric acid and 2-keto-3-($<n\text{C}$ -methyl)-4-($<n\text{C}$)-butyric acid in which n, at each occurrence, is 13 or 14. Also disclosed are proteins, protein fragments, and polypeptides containing these site-specifically isotopically labeled amino acids, and methods for preparing the biochemical precursors, the amino acids, and the proteins, protein fragments, and polypeptides.

IPC 1-7
C07B 59/00; **C07C 229/08**; **C07C 59/185**; **C12P 21/00**; **C07K 1/13**

IPC 8 full level
C07B 59/00 (2006.01); **C07C 51/09** (2006.01); **C07C 51/353** (2006.01); **C07C 59/185** (2006.01); **C07C 229/08** (2006.01); **C07K 1/107** (2006.01); **C12N 15/09** (2006.01); **C07K 1/13** (2006.01); **C07K 14/47** (2006.01); **C12N 9/64** (2006.01); **C12P 13/04** (2006.01); **C12P 13/06** (2006.01); **C12P 13/08** (2006.01); **C12P 21/00** (2006.01); **C12P 21/02** (2006.01)

CPC (source: EP KR)
C07B 59/001 (2013.01 - EP); **C07C 229/08** (2013.01 - EP KR); **C07K 1/1075** (2013.01 - EP); **C07K 1/1077** (2013.01 - EP); **C07K 1/13** (2013.01 - EP); **C12N 9/6491** (2013.01 - EP); **C12P 13/04** (2013.01 - EP); **C12P 13/06** (2013.01 - EP); **C12P 13/08** (2013.01 - EP); **C12P 21/02** (2013.01 - EP); **C07B 2200/05** (2013.01 - EP); **C07B 2200/07** (2013.01 - EP)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0061525 A1 20001019; AR 029747 A1 20030716; AT E296789 T1 20050615; AU 4212100 A 20001114; AU 777749 B2 20041028; BG 106043 A 20020531; BR 0009664 A 20020108; CA 2368652 A1 20001019; CA 2368652 C 20091110; CN 1244521 C 20060308; CN 1353678 A 20020612; CO 5160349 A1 20020530; CZ 20013616 A3 20020417; DE 60020547 D1 20050707; DE 60020547 T2 20060504; DK 1169282 T3 20051003; EP 1169282 A1 20020109; EP 1169282 B1 20050601; ES 2243251 T3 20051201; HK 1044753 A1 20021101; HK 1044753 B 20060324; HU P0200809 A2 20020629; HU P0200809 A3 20041129; IL 145536 A0 20020630; IL 145536 A 20100531; JP 2002541228 A 20021203; KR 100708225 B1 20070417; KR 20010108475 A 20011207; MX PA01010183 A 20030721; NO 20014691 D0 20010927; NO 20014691 L 20011210; NZ 514518 A 20031031; PL 350889 A1 20030210; PT 1169282 E 20051031; SI 1169282 T1 20051031; SK 14322001 A3 20020205; TR 200102842 T2 20020321; TW I283659 B 20070711; ZA 200107919 B 20030326

DOCDB simple family (application)
US 0009296 W 20000407; AR P000101600 A 20000407; AT 00921858 T 20000407; AU 4212100 A 20000407; BG 10604301 A 20011024; BR 0009664 A 20000407; CA 2368652 A 20000407; CN 00808251 A 20000407; CO 00025250 A 20000406; CZ 20013616 A 20000407; DE 60020547 T 20000407; DK 00921858 T 20000407; EP 00921858 A 20000407; ES 00921858 T 20000407; HK 02104717 A 20020625; HU P0200809 A 20000407; IL 14553600 A 20000407; IL 14553601 A 20010921; JP 2000610803 A 20000407; KR 20017012833 A 20011008; MX PA01010183 A 20000407; NO 20014691 A 20010927; NZ 51451800 A 20000407; PL 35088900 A 20000407; PT 00921858 T 20000407; SI 200030724 T 20000407; SK 14322001 A 20000407; TR 200102842 T 20000407; TW 89105713 A 20000328; ZA 200107919 A 20010927